band emission limitations shall be established in accordance with §21.908(e) of this chapter.

[63 FR 65119, Nov. 25, 1998, as amended at 64 FR 63740, Nov. 22, 1999; 65 FR 46623, July 31, 2000]

§ 74.949 Individually licensed 125 kHz channel ITFS response stations.

- (a) The provisions of §74.939(a), (e), (h), (j), (k), (n) and (o) shall also apply with respect to the authorization of 125 kHz channel ITFS response stations not authorized under a response station hub license. The applicant shall also comply with the requirements of §74.903 and §21.938 of this chapter where appropriate, as well as with the provisions of §§ 21.909 and 21.913 of this chapter and of §§74.939 and 74.985 regarding the protection of response station hubs and booster (and primary) service areas from harmful electromagnetic interference, using the appropriately adjusted interference protection values based upon the ratios of bandwidths involved.
- (b) An application for a license to operate a new or modified 125 kHz channel ITFS response station not under a response station hub license shall be filed with the Commission in Washington, D.C., on FCC Form 331. The applicant shall supply the following information and certification on that form for each response station:
- (1) The geographic coordinates and street address of the ITFS response station transmitting antenna; and
- (2) The manufacturer's name, type number, operating frequency, and power output of the proposed ITFS response station transmitter; and
- (3) The type of transmitting antenna, power gain, azimuthal orientation and polarization of the major lobe of radiation in degrees measured clockwise from True North; and
- (4) A sketch giving pertinent details of the ITFS response station transmitting antenna installation including ground elevation of the transmitter site above mean sea level; overall height above ground, including appurtenances, of any ground-mounted tower or mast on which the transmitting antenna will be mounted or, if the tower or mast is or will be located on an existing building or other manmade

structure, the separate heights above ground of the building and the tower or mast including appurtenances; the location of the tower or mast on the building; the location of the transmitting antenna on the tower or mast; and the overall height of the transmitting antenna above ground.

- (5) A certification that all licensees and applicants appropriately covered under the provisions of paragraph (a) of this section have been served with copies of the application.
- (c) Each ITFS response station licensed under this section shall comply with the following:
- (1) No ITFS response station shall be located beyond the protected service area of the ITFS station with which it communicates; and
- (2) No ITFS response station shall operate with a transmitter output power in excess of 2 watts; and
- (3) No ITFS response station shall operate at an excess of 16 dBW EIRP.
- (d) During breaks in communications, the unmodulated carrier frequency shall be maintained within 35 kHz of the assigned frequency at all times. Adequate means shall be provided to insure compliance with this rule.
- (e) Each ITFS response station shall employ a directive transmitting antenna oriented towards the transmitter site of the associated ITFS station or towards the response station hub with which the ITFS response station communicates. The beamwidth between half power points shall not exceed 15° and radiation in any minor lobe of the antenna radiation pattern shall be at least 20 dB below the power in the main lobe of radiation.
- (f) A response station may be operated unattended. The overall performance of the response station transmitter shall be checked by the licensee of the station or hub receiving the response signal, or by the licensee's employees or agents, as often as necessary to ensure that the transmitter is functioning in accordance with the requirements of the Commission's rules. The licensee of the station or hub receiving the response signal is responsible for the proper operation of the response station and must have reasonable and timely access to the response station

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transmitter. The response station shall be installed and maintained by the licensee of the associated station or hub, or the licensee's employees or agents, and protected in such manner as to prevent tampering or operation by unauthorized persons. No response station which has not been installed by an authorized person may lawfully communicate with any station or hub.

[63 FR 65124, Nov. 25, 1998. Redesignated at 64 FR 4055, Jan. 27, 1999, as amended at 64 FR 63742, Nov. 22, 1999]

§74.951 Modification of transmission systems.

Formal application on FCC Form 330 is required for any of the following changes or modifications of the transmission systems:

- (a) Replacement of the transmitter as a whole, except replacement with a transmitter of identical power rating which has been certificated by the FCC for use by instructional TV fixed stations, or any change which could result in a change in the electrical characteristics or performance of the station. Upon the installation or modification of the transmitting equipment for which prior FCC authority is not required under the provisions of this paragraph, the licensee shall place in the station records a certification that the new installation complies in all respects with the technical requirements of this part and the terms of the station authorization.
- (b) Any change in the antenna system affecting the direction of radiation, directive radiation pattern, antenna gain, or radiated power; provided, however, that a licensee may install a sectorized antenna system without prior consent if such system does not change polarization or result in an increase in radiated power by more than one dB in any direction, and notice of such installation is provided to the Commission on FCC Form 331 within ten (10) days of installation. When an applicant proposes to employ a directional antenna, or a licensee notifies the Commission pursuant to this paragraph of the installation of a sectorized antenna system, the applicant shall provide the Commission with information regarding the orientation of the directional antenna(s),

expressed in degree of azimuth, with respect to true north, and the make and model of such antenna(s).

- (c) Any change in the overall height of the antenna structure, except where notice to the Federal Aviation Administration is specifically not required under §17.14(b) of the FCC Rules.
- (d) Any change in the location of the transmission system except a move within the same building or upon the same antenna supporting structure.
- (e) A change in frequency assignment.
- (f) A change in the operating power.
- (g) Any addition of receiving locations or to modify such a location to a receive and response station.

[45 FR 26068, Apr. 17, 1980, as amended at 50 FR 26761, June 28, 1985; 52 FR 3806, Feb. 6, 1987; 53 FR 36788, Sept. 22, 1988; 63 FR 36605, July 7, 1998; 63 FR 65124, Nov. 25, 1998; 65 FR 46623, July 31, 2000]

§74.952 Acceptability of equipment for licensing.

ITFS transmitters must be type certified by the Commission for the particular signals that will be employed in actual operation. Either the manufacturer or the licensee must obtain transmitter certification for the transmitter by filing an application for certification with appropriate information concerning the signal waveforms and measurements.

[63 FR 65124, Nov. 25, 1998]

§74.961 Frequency tolerance.

(a) Beginning January 21, 2000, equipment authorized to be used at all ITFS main stations, and at all ITFS booster stations authorized pursuant §74.985(b), shall maintain a frequency tolerance of 0.001%. ITFS booster stations authorized pursuant to §74.985(e) and ITFS response stations authorized pursuant to §74.939 shall employ transmitters with sufficient frequency stability to ensure that the emission is, at all times, within the required emission mask. A transmitter licensed prior to November 1, 1991 that remains at the station site for which it was initially authorized and does not comply with the provisions of this paragraph may continue to be used if it does not cause harmful interference to the operations